ABSTRACT OF THE DISCLOSURE

The present invention provides a human sodium-dependent phosphate cotransporter (NAPTR) and polynucleotides which identify and encode NAPTR. The invention also provides genetically engineered expression vectors and host cells comprising the nucleic acid sequences encoding NAPTR and a method for producing NAPTR. The invention also provides for agonists, antibodies, or antagonists specifically for NAPTR. Additionally, the invention provides for the use of antisense molecules to polynucleotides encoding NAPTR for the treatment of diseases associated with the expression of NAPTR. The invention also provides diagnostic assays which utilize the polynucleotide, or fragments or the complement thereof, and antibodies specifically binding NAPTR. The invention also provides a method for treating disorders associated with decreased phosphate levels by administering NAPTR and a method for treating disorders associated with increased phosphate levels by administering antagonists to NAPTR.